



Our ref: E-1024

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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In re Application of: Tore :
DANIELSSEN :
: Group : 1713
Serial No. :09/830,860 :
: Examiner: R.A. Lee
Filed :June 11, 2001 :
Title :RESIN COMPOSITIONS, :
METHOD OF PRODUCING :
RESIN COMPOSITIONS :
AND FILLER BLENDS :
FOR USE IN RESIN :
COMPOSITIONS :

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DECLARATION

Hon. Commissioner of Patents
P.O. Box 1450
Alexandria, VA 22312-1450

S i r:

I, Gerd Schmaucks, hereby declare and say as follows:

1. I received a Masters Degree in Chemistry from the University of Leipzig, Germany, in 1984 and a PhD from the Technical University Merseburg, Germany in 1993. I worked for about 3 years as a Development Engineer in the Research

and Development of Gummiwerke, Berlin, Germany, where I worked in the field of rubber compounds; I was a scientific co-worker for about 7 years at the Academy of Sciences, later renamed Max-Planck Institute of Colloid and Surface Chemistry, Berlin, Germany where I worked in the field of surfactants; I was a Development Manager for about 4 years at BICC Cables Ltd. spending time in both Berlin, Germany and Leigh, Lancashire, England where I worked in the field of cable compound development; I was Manager of Research and Development for about 7 months at Schill & Seilacher GmbH & Co., K.G. Hamburg, Germany, where I worked in the field of additives for rubber and then I worked as a consultant ~~for them~~ for 1.5 years; and since 2000, I have been Project Manager, Research and Development for Elkem Materials where we work in the field of microsilica and its use in a wide variety of products to include plastics.

2. I have read and understand the Invention as recited in U.S. Patent Application No. 09/830,860 the U.S. National Phase of International Application No. PCT/No. 99/00336.

3. A blend of microsilica and talc are the only known combination of minerals that provides both high stiffness and high impact strength to plastic polymers at the same time. To demonstrate both the high stiffness and high impact which is provided to plastics, a series of tests have been performed by me or under my direct supervision and control. These tests are reported below.

4. Using polypropylene and the procedure outlined in Example 1 of the Application, thirteen different formulations were tested for both impact strength and tensile strength. The results of the tests are reported in Table A, attached hereto. For comparative purposes, the test results from Example 1 of the Application for fillers of just talc, just microsilica and no filler, just polypropylene are included in the data of Table A.

5. The first four tests in Table A were run with a different talc than the later tests, otherwise, the materials used the formulations and test procedures in each test were the same as reported in Example 1 of the Application.

6. As can be seen in Table A, both a high impact and high tensile strength was obtained when employing the blend of microsilica and talc. It should be noted that in the blends, the amount of talc or microsilica is less than the amount of talc or microsilica in the plastic which contained only talc or only microsilica. For example, the 5% blend contains less than 5% microsilica and less than 5% talc and I consider it surprising and unexpected that a 5% blend of 2/1 talc to microsilica performs as well as the 5% talc alone or 5% microsilica alone. I also consider the other results reported for the blends to be surprising and unexpected because they have both high impact and high tensile strength.

It is declared by undersigned that all statements made herein of undersigned's own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S. Code 1001, and that such willful false statements

may jeopardize the validity of this Application or any other patent issuing thereon.


Gerd Schmaucks

Dated: This 06 day of February, 2004.

Encl: Table A

DCL/mr